COLORADO
Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

1/12/2018

Ozone Data Managers,

The Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division (APCD) is currently evaluating calendar year 2017 ambient ozone data for potential stratospheric ozone intrusion events and wildfire smoke events that may be considered for Exceptional Event status as defined by the Code of Federal Regulations (CFR) Title 40 Parts 50 and 51. The APCD has identified five stratospheric intrusion events and eight wildfire smoke events in 2017, of which, one intrusion event and one smoke event appear to have significantly affected at least one of the following Colorado-based federally operated ozone monitors: Mesa Verde (CASTNET), Gothic (CASTNET), Rocky Mountain National Park (NPS), and Rocky Mountain National Park (CASTNET).

The Exceptional Event Rule (EER) was published March 22, 2007 and became effective May 21, 2007. The EER allows the ambient air quality data which is submitted to AQS and used in making regulatory decisions, to be, in some cases, flagged and, where appropriate, excluded from calculations in determining whether or not an area has attained the standard. As these federally operated ozone analyzers are, or may be designated as regulatory analyzers, Colorado will be held liable for making National Ambient Air Quality Standards (NAAQS) determinations from data collected by these analyzers. The data flagged as "exceptional" must have been affected by an exceptional event, which is defined as an event that affects air quality, is not reasonably controllable or preventable, is an event caused by human activity that is unlikely to recur at a particular location or a natural event, and is determined by the EPA, in accordance with 40 CFR 50.14, to be an exceptional event. Ultimately, only flagged events that may affect the designation status of an area will be considered for justification documentation.

Stratospheric ozone intrusion and wildfire smoke events are forecasted and documented by APCD meteorologists for public advisories. Once an event is verified and data is validated, all 1 hour average data associated with the forward looking 8 hour averages in excess of 70 ppb are flagged with an "IO" or "IT" informational flag in AQS. Additional 1 hour data points occurring prior to the 1 hour points associated with 8 hour averages in excess of 70 ppb may be identified to further clarify the start of the event. Data from these federally operated ozone monitors were obtained from AQS and evaluated using the same criteria as data from APCD monitors. The following are date/time ranges from federally operated ozone monitoring sites, as identified by the APCD, that have been influenced by a stratospheric ozone intrusion or wildfire smoke and should be appropriately flagged in AQS with an "IO" (Stratospheric Ozone Intrusion) or "IT" (Wildfire-U.S.) informational flag. The APCD does not have the AQS screening group clearance to add informational flags to data collected at federal air monitoring sites and requests that the federal agencies that operate these monitors consider flagging these data.

Stratospheric Ozone Intrusion Events ("IO" Informational Stratospheric Intrusion Flag)

4/22/17 Event

Gothic	*(08-051-9991)*	*4/22/17, hour 6*	*to*	*4/23/17, hour 3*	*Max 8hr O3: 82 ppb*
Mesa Verde	*(08-083-0101)*	*4/22/17, hour 9*	*to*	*4/22/17, hour 19*	*Max 8hr O3: 72 ppb*

Wildfire Smoke Events ("IT" Informational Wildfire Smoke Flag)

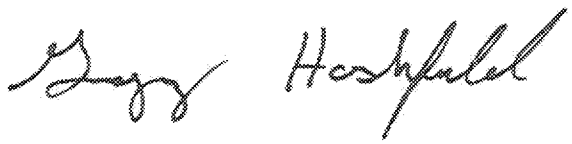
9/6/17 Event

Rocky Mtn. NP (08-069-0007) 8/24/17, hour 11 to 8/24/17, hour 23 Max 8hr O3: 74 ppb
Rocky Mtn. NP (08-069-9991) 8/24/17, hour 12 to 8/24/17, hour 23 Max 8hr O3: 74 ppb

In the past (2007 - 2015) the APCD recommended the use of "RO" and RT" exclusion flags to identify all stratospheric and wildfire smoke ozone events. The use of these flags also required the inclusion of an event description in AQS. This is no longer required when initially identifying events for informational purposes. EPA is now requesting that "IO" and "IT" informational flags be added when initially identifying events. The EPA has not mandated the use of informational flags, however the APCD recognizes the advantages of using them as a way to publicly identify data affected by exceptional events and for their use as placeholders for potential exclusion flags. Conversion of the "IO" and "IT" informational flags to the "RO" and "RT" exclusion flags along with the inclusions of an event description will be required if the APCD elects to submit justification documentation to EPA for concurrence. If elected, this conversion of informational flags to exclusion flags would occur at a later date by an additional request from the APCD.

The APCD appreciates your consideration and any assistance you can provide in adding stratospheric ozone intrusion and wildfire qualifier codes to the above listed data. Please feel free to contact me with questions or comments.

Regards,



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